

REMARKS

Reconsideration is respectfully requested. Claims 1-5, 7, 9, 10 and 13-15 are present in the application. Claims 1 and 15 are amended herein.

The Examiner objected to the drawings. The objection is believed to be resolved in view of the amendment to claim 15 discussed hereinbelow.

The Examiner is objecting, under 35 U.S.C. §112, first paragraph, to the use of the term "passive element" in claim 15, taking the position that such concept is not shown in the drawings and that it is not disclosed in the specification. Applicant respectfully submits that the concept is supported by the specification. However, to further prosecution, amendments to claim 15 are made to refer to a connection wire, in absence of an active circuit element. The English specification at page 10, in the first full paragraph of that page, discusses the use of connection wire 6c, which is supportive of the "absence of active element" concept. Since this amendment incorporates the concepts of claims 16 and 17 into claim 15, claims 16 and 17 are canceled. As noted above, the objection to the drawings is believed resolved by this amendment.

The Examiner alleges that claims 1-10 and 13-17 are indefinite, under 35 U.S.C. §112, second paragraph, asking that the structure and arrangement be clarified. While it seems to

applicant that the claim 1 as presented is clear, an amendment to re-word the claim is presented. The amendment does not change the meaning of the claim. Also, the above-discussed claim 15 amendment should also resolve the Examiner's objection here to that claim.

The Examiner rejects claims 1-10 and 13-17, under 35 U.S.C. 103(a) as being unpatentable over Andoh et al. U.S. 5,095,357 in view of Kuhn et al. U.S. 5,892,425. Applicant respectfully traverses.

The Examiner refers to figure 16a of Andoh et al. and states, "Andoh et al. inherently discloses the lower spiral conductor has an end that is open". This interpretation is respectfully believed to be adding something to Andoh et al that is not present in that document. It is clear Andoh et al. does not intend for either of the ends of spiral 2 or of spiral 62 to be open, or considered open. The top spiral 2 is to be made part of a larger circuit, connected at terminal 5 and 7. Andoh introduces the identical arrangement of top spiral 2 (wherein "like elements are given the same reference numbers (col. 3 lines 49-50).) with Fig. 1. Column 3 lines 65-68 describes "...terminal 5 for ease of connection by wire bonding or other techniques to other circuit components. Internal end 4 is connected through a lead 6 to a terminal 7 for making external connections." The Andoh et al bottom spiral 62 in Fig 16(a) is connected to terminal 5 via a circuit to vary current flow 70 at

one end. At the other end spiral 62 is connected to "the ground plane 8 by means of a via 72" (col. 11 line 56).

Independent claims 1 and 15 both include limitations that patentably define over Andoh and Kuhn et al taken alone or together. Claim 1 by at least the limitation "...wherein the other conductor is nearest the substrate and has an end that is open". And claim 15 by the limitation "the other conductor has an unconnected end".

Another limitation also in claim 1 further separates the applicants' invention from the references relied on, "...the outer end of the first conductor is connected with the inner end of the other conductor". The Examiner admits Andoh et al. does not disclose the outer end of the upper conductor being connected to the inner end of the lower conductor. The Examiner then continues that "Kuhn et al. discloses a spiral inductor [figure 3A] comprising first and second conductors [22, 26], each having inner ends and outer ends wherein the outer end of the first conductor [22] being connected to the inner end of the second conductor [26] via a passive conductor wire element [8] and the second conductor having one end that is open."

It is respectfully believed that the Examiner's position results from a misreading the Kuhn et al reference. Kuhn et al teach a center-tapped spiral inductor (title). A center tapped inductor is an inductor having a connection at the electrical center. Inspection of Fig. 3A makes it clear Kuhn is teaching a

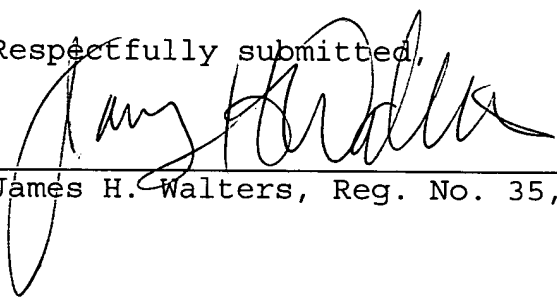
single inductor with terminals 28 and 24 at either end thereof. The center of the coil is tapped with a center tap connection 20. If one follows the coil in Fig. 3A from terminal 28 clockwise toward the inside to point 18, then outward to point 16, then clockwise spiraling in to point 20, opposite terminal 24 is reached via cross-connect trace 10. There is no open (unconnected) end. There is no first and second conductor in the sense that the applicant here claims. Kuhn et al refers to items 22 and 26 as inductor halves. In column 4 lines 13-15 Kuhn et al disclose "The vias at points 16 and 18 connect, via trace 8, two respective ends of the interwound spiral trace 12 into a center tap connection terminating at 20." Kuhn et al refer to items 22 and 26 as inductor halves.

The Examiner states "It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the connections of Kuhn et al. in Andoh et al for the purpose of providing tapping." However, applicant respectfully traverses and does not agree that the Examiner's comment supports rejection under 35 U.S.C. 103(a) as the present application does not claim "tapping". The Kuhn reference teaches a center tapped inductor. The reference does not teach constructing a superior inductor on a substrate with minimized eddy currents and superior induction made possible as described and claimed by applicant.

The other claims depend from and include all the limitations of claim 1, considered to be in condition for allowance as discussed. They are therefore also considered to be in condition for allowance.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice thereof is respectfully solicited. The Examiner is asked to contact applicant's attorney at 503-224-0115 if there are any questions.

Respectfully submitted,


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